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Amendments to the Specification

[0018] FIG. 2 is a longitudinal sectional view of a high pressure compressor ~~rotor~~ rotor stack of the engine of FIG. 1.

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[0036] With the segments in place, a segment retaining means may be provided. In the exemplary retainer, this includes a full annulus retaining ring 220 (FIG. 7) having an outboard surface 222 and a stepped inboard surface having: an aft portion 224 of corresponding diameter and extent to the segment outboard surface 218; and a smaller fore portion 226. The fore portion 226 is separated from the aft portion 224 by a radial shoulder 228 and the fore portion 226 has a diameter corresponding to that of an adjacent portion 230 of the shaft. In the exemplary embodiment, the retaining ring may be slid (translated) into position and held in that position by the subsequent insulation of a bearing retainer 232 for the bearing system 30 thereafter. Alternatively or additionally, there may be a threaded or other locking engagement between the surface portions 230 and 226. With the precompressive retainer 84 thus installed, the applied force may be released, permitting the rotor stack to slightly decompress. The release brings the rim surface 82 into engagement with the segment aft surfaces 214. With the rim surface 82 bearing against the retainer segments 210A and 210B, the retainer segment aft fore surfaces 212 bear against the rebate aft fore surface 204 to transmit force between the rotor stack and the shaft 28. The result is to leave the rotor stack with a residual precompressive force and the portion 56 of the shaft 28 within the rotor stack with an equal and opposite pretension force. An exemplary precompression force is 50-200kN. Advantageous force will depend upon the size of the rotor stack, with longer stacks requiring greater force. To achieve this, the assembly precompression force may be slightly greater (e.g., by 5-20%).